## Abstract

The present invention relates to a drive circuit for an LED array which comprises a first LED cluster (40) and at least one second LFD cluster (42; 44), the switch (S1, S2, S3) being arranged in series with each LED cluster (40, 42, 44) / and each LED cluster (40, 42, 44) having a supply terminal. A control loop (46) designed to drive/the switch (S1) of the first LED cluster (42) so as to achieve a constant mean value of the current (ILED) flowing through the first LED cluster (42), the control loop (46) being designed for also driving the switches of the further LED clusters (42, 44). The drive circuit also comprises a total current detection deyice  $(R_{Mess})$  with the aid of which it is possible to/determine an actual magnitude  $(U_{Mess})$  which corresponds/ to the sum of the currents through at least in particular through all of the second LED clusters /(42, 44). A comparison unit (50) compares the actual magnitude ( $U_{Mess}$ ) with a predefinable desired magnitude (UoL).

(Figure 3)